Irish Naturalist. (Vol. xxx. nos. 1-3.)
Journal of the Bombay Nat. Hist. Soc. (Vol. xxvii. no. 2.)
Journal of the Federated Malay States Museum. (Vol. x. no. 2.)
Journal of the Natural History Society of Siam. (Vol. iii. no. 5.)
Journal für Ornithologie. (Vol. 69, no. 1.)
Oologists' Record. (Vol. i. no. 1.)
Ornithologische Monatsberichte. (Vol. 29, nos. 1/2, 3/4.)
Revue Française d'Ornithologie. (Nos. 140-143.)
Revue d'Histoire naturelle appliquée. L'Oiseau. (Vol. i. no. 12; vol. ii. nos. 1, 2.)
Scottish Naturalist. (1921, nos. 109, 110.)
South African Journal of Natural History. (Vol. ii. no. 2.)
South Australian Ornithologist. (Vol. v. no. 4.)
Tori. (Vol. ii. no. 10.)
Verhandl. Orn. Ges. Bayern. (Vol. xiv. pt. 4.)

### XX.—Letters, Extracts, and Notes.

#### The Last Phase of the Subspecies.

SIR,—The interesting letter from Mr. Loomis in the October number of 'The Ibis' will be welcomed by many ornithologists on this side of the Atlantic, and not least by some of those who might be termed "subspecies" men.

It seems to us that up to the present the excuse—in fact, the necessity—for trinomialism lies in the fact that binomial names, and consequent recognition of complete specific distinction, had been conferred on many mere geographical variations. The trinomialist then arrived on the scene, and did much good by reducing such geographical forms to their true position as races, or mere climatic variations, of one species. He also named and continues to name other races, which he considers as distinct as those which have names already.

Now, even those who oppose all trinomialism will agree that, as the species is the only definite minor unit in nature, any system which enables us at a glance to appreciate properly the true specific relationship of a form whose rank as a distinct species had previously been misconceived, would be welcomed by any ornithologist. It must be remembered that a multitude of races have been named of late years, yet the number of *species* inhabiting, say, a continent like Africa is known now to be considerably less than was supposed ten years ago. The last phase, as Mr. Loomis says, now approaches, for the whole of the geographical variations of many species are now known, and the question arises "of what scientific value are these variations?"

Well, it seems to us personally that trinomialism supplies a handy (not invariably handy) adjective which is internationally understood, and which designates birds from a certain locality in a short and concise way. By the recognition of subspecies we can also map out migration-routes of birds from any given locality, and can note the effect of environment on any given species throughout its range. But beyond this we venture to suggest that the value of subspecies is small, and that their taxonomic value is, in many cases, *nil*.

On the other hand, to those who accept in toto the Darwinian theory-or what is commonly accepted as the Darwinian theory-and all that it implies, all subspecies will appear of great value as "incipient species." Now, for our part it has always been a matter of the greatest difficulty to imagine how a geographical form. which, in fact, is already a species, can be termed an "incipient" one: for surely if any given specific group has, we will say, x forms or variations, those x forms have all equal specific entity, differing slightly or superficially by the increment or decrement of some small characteristics. Indeed, if we believe with ultra-Darwinians in the "little by little" theory of evolution, there is no obvious reason why the "typical form" of any specific group should not be just as much an incipient species as its most distant geographical race.

Speaking for ourselves, however, we no longer believe in the "little by little" theory of evolution, nor incidentally in "Natural Selection," except in its purely selective, as opposed to creative, sense—and even in this sense we feel

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sceptical on the point as to whether Natural Selection, acting on even discontinuous variations, can have any practical effect on the formation of species, or whether it is not superfluous to invoke the action of Natural Selection at all-nor do we believe in the action of environment in the initiation of new species. The only thing in our opinion which can give rise to a new species is the conjugation of two gametes possessed of some unusual factor or other to form a zygote. We believe that the beginnings of a new species may occur from the union of any two birds anywhere, and is a matter of the chance presence or absence, stimulation or suppression, of factors in the germ-plasm. It must be remembered, however, that over so small a part of the world's history do man's observations extend in point of time, that we cannot definitely state whether or not species are being formed at all at the present day.

There is, moreover, a point in this question of the value of subspecies to which we cannot help thinking ornithologists in general have not hitherto paid sufficient attention. They appear, indeed, to have ignored the very probable fact that there are two main forms of variations—one known as "mutational," in which the variation is discontinuous and dependent on the presence in the organism of definite factors which are resident in the *germ-plasm*, and which are therefore heritable, the other known as a "fluctuational," "environmental," or continuous variation, which is directly due to the action of the environment on the soma during the lifetime of the organism, and which effect cannot be passed on to future generations.

We think there can be little doubt that many—indeed, by far the majority—of our present-day subspecific forms belong to this last category, and are mere environmental, unstable, and essentially superficial variations, which would quickly disappear if the organism were transferred from its normal environment to some other of a different nature. Many such environmental subspecies present variations which are 1921.]

merely quantitative as opposed to qualitative, and it would be interesting in this connection to make a comparative examination of the number of present-day subspecies occurring in a genus where the colours are due to peculiarities of structure in the feathers and the reflection of light upon them—as, for example, in many species of *Cinnyris* or *Nectarinia*,—and, on the other hand, in a genus where the colour is directly due to pigment which can be acted on by humidity, light, etc.

Mutational variations, on the other hand, present characteristics which are directly derived from the action of factors resident in the germ-plasm, which are totally independent in their origin of the action of environment, and which are stable—given favourable conditions. Mutational variations in all probability never intergrade, and they are dependent on isolation whatever form that isolation may take, either geographical or physiological. Natural selection may here play a decisive part in determining their future. The ignoring by ornithologists of these two different forms of variation has led, in our opinion, to the making of subspecies, which, in fact, have very different values and rank.

It appears, therefore, that before we can answer the question propounded by Mr. Loomis "Of what scientific value is a subspecies?", it behoves us to set our subspecific house in order with a view to gaining a more accurate and definite appreciation of the exact rank of our subspecies, and if necessary to note their quality by some definite nomenclatural method. Finally, we would like to add that if subspecies are sought for and recognized solely with a view to the intensive study of variation, and if their recognition tends to throw any light on the still more elusive question "What is a species and how is it formed?" we are all in favour of their recognition.

> P. R. Lowe. C. Mackworth-Praed.

Natural History Museum, 12 February, 1921.

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### The Nomenclature of Plumages.

SIR,-In the January number Capt. Collingwood Ingram draws attention to an error in his paper (Ibis, 1920, p. 857), and states that it is important "as it largely vitiates my definition of Mesoptile." Capt. Ingram was apparently unaware of my remarks in the 'Bulletin' (vol. xxvii. p. 83), when I dealt with the four plumages of the young Eagle-Owl and pointed out that the Barn-Owl was exceptional and that the third plumage was suppressed in that species. Further investigations have led to the conclusion that in other groups of birds we may also have three generations of plumage prior to the first adult dress. Mr. Pyeraft, apparently being unaware of this fact, called these plumages protoptiles, mesoptiles, and teleoptiles, and I suggested that the generation immediately preceding the adult dress should be known as hemiptiles. My nomenclature therefore agrees with Capt. Ingram's in calling the "second generation of feathers" mesoptiles, but these do not immediately precede the adult feathers. Mesoptiles, as I understand them, are the generation preceding the hemiptiles, which in the Passeres are what is commonly known as the juvenile plumage. It is expedient in this, as in other branches of Ornithology, to keep our nomenelature as uniform as possible.

J. LEWIS BONHOTE.

Carshalton, 8 January, 1921.

## Nestling Owls.

S1R,—Captain Collingwood Ingram in his letter correcting the mistake he had made between the Barn Owl and Tawny Owl might have added the Scops  $(Scops \ giu)$  to the list of Owls which do not have any intermediate down between the first nestling down and the assumption of the complete feather plumage. This is recorded in the 'AvienItural Magazine,' August 1899, page 160 :—

"The white down in the nestling is replaced by a plumage almost precisely resembling that of the adults, so they differ 1921.

from all the Owls, except the Barn Owls, in having no intermediate down between the easting of the white down and the assumption of full plumage."

Incidentally, I may draw attention to other facts mentioned in the same article on the breeding of the Seops Owl, which point out how widely the Scops differ from all other Owls. Incubation only lasts twenty-three to twenty-four days. The young, instead of remaining long in the nest and being tended by the parents for a long time afterwards, are just the reverse. Young hatched on 10 June left the nest strong perchers on 1 July, and by 10 July were strong fliers and independent. It will thus be seen that the young Scops is full grown, full fledged, and independent at thirty days old. All the other Owls are in the nest or, at any rate, dependent on their parents for at least three months.

E. G. B. MEADE-WALDO.

Hever, Kent, 6 February, 1921.

### The Status of Picus rubricollaris Baker.

SIR,—In a letter dated January 7th, 1921, my colleague, Mr. C. Boden Kloss, has asked me to point out that the handsome Woodpecker described by Mr. Stuart Baker and figured in the last number of 'The Ibis' as *Picus rubricollaris* is wrongly attributed to Siam, the localities in which it was collected being, as a matter of fact, both in French Laos, on or near the River Mekong.

Further, the new "species" appears to be identical with, or extremely closely allied to, a bird figured and described by Oustalet twenty-two years ago as *Gecinus rabieri* (Bull. Mus. d'Hist. Nat. 1898, p. 12; id. Nouv. Areh. du Mus. (4) i. 1899, p. 255, pl. vii.) founded on two unsexed specimens, considered males, but evidently females; from Tonkin.

I have myself compared Mr. Baker's types with Oustalet's figures and description, and have not the least doubt that Mr. Kloss is perfectly correct. The slight differences between the actual bird from the Mekong and the figure of *Gecinus rabieri* are not more than can be accounted for by the notorious incorrectness of the plates in the Nouv. Arch., which frequently do not agree with the text.

The figures in • The Ibis ' also are unfortunately not all that can be desired—the male especially is shown with the red collar far too pronounced.

Yours truly,

London, 7 February, 1921. HERBERT C. ROBINSON.

# The Annual General Meeting of the British Ornithologists Union.

The Annual General Meeting of the British Ornithologists' Union for 1921 was held on Wednesday, March 9, at the Offices of the Zoological Society of London, Mr. G. M. Mathews in the Chair.

There were 36 members present.

The Minutes of the last meeting were read and confirmed.

Mr. H. J. Elwes, F.R.S., F.Z.S., was unanimously elected President of the Union in place of Dr. W. Eagle Clarke resigned.

Before proposing members to fill vacancies on the Committee, the Chairman informed the meeting that he proposed to put up the three members nominated by the Committee, and to then take the feeling of the meeting as to whether the remaining two vacancies should be filled at once or in accordance with the method approved at the previous Annual Meeting. The Rev. F. C. R. Jourdain at this point interposed, objecting to this method of procedure on the grounds that Major Sladen had not been proposed merely for the purpose of filling one of the two existing vacancies, but to fill any one of the three or five vacancies which the meeting should decide to fill. After some discussion the Chairman decided that the meeting should be asked to express their opinion by voting. On a show of hands the motion proposed by Mr. Bonhote and seconded by Mr. Smeed 1921.]

that all the vacancies should all be filled at once was carried by 15 to 9, many members not voting.

The five members nominated were then unanimously elected, with the exception of Mr. C. D. Borrer, who was elected by 11 votes to 8.

The following Foreign Member was elected Honorary Member :---

Dr. E. D. Van Oort.

The following were elected Foreign Members :--

Dr. Otmar Reiser. Mr. Richard C. McGregor. Mr. Charles B. Cory.

The Chairman then called upon the Secretary to read the Report of the Committee for 1920, viz. :---

"The Committee regret that they have to report that the financial position for 1920 is even more unsatisfactory than that for 1919, and the year under report ended with an adverse balance of practically £190. The reason for this adverse balance is entirely the great cost of publishing "The Ibis," which increased from £1000 in 1919 to practically £1300 in 1920. At the same time it should be noted that "The Ibis" for 1920 contained a greater number of pages than that of a normal year.

"To meet the deficit in the Society's funds, the Committee recommended at a special General Meeting called together on the 13th of October that the subscription should be raised to  $\pounds 2$ . This recommendation was unanimously adopted, and will be put before the present meeting for confirmation. The Committee are very glad to report that, pending this confirmation, a large majority of the members of the Union have already subscribed the full  $\pounds 2$  for the present year.

"The Trustees of the British Museum have, we regret to say, declined to again give us any donation towards the cost of publishing Museum articles in 'The Ibis,' but it is still hoped that they may be induced to contribute something towards the actual expenses of such articles. Letters, Extracts, and Notes.

"The Committee anticipate that with the increase of the subscription to  $\pounds 2$  and entrance fee to  $\pounds 4$ , the funds received will be sufficient to cover the expenses of the Union and to provide a small balance.

"The present volume of 'The Ibis' is the sixty-second, and is the second of the Eleventh Series. It contains 1022 pages, and is illustrated with five coloured plates, thirteen uncoloured plates, and three text-figures—that is to say that 'The Ibis' for 1920 contains nearly 200 pages more than that for 1919, although even for that year 'The Ibis' was much larger than usual.

"The Committee have given instructions that 'The Ibis' be sold to the public at the rate of 12s. 6d. per number and to members at 10s. Members will, we trust, appreciate the fact that we sell 'The Ibis' for less than it costs to print and publish.

> Sir J. A. Brooke. C. G. Finch Davies. R. Etheridge. J. Gerrard. Rev. C. W. Shepherd.

" The following gentlemen have resigned :---

	DGOI
Major W. B. Arundel.	B. S. Ogle.
BrigGeneral A. Bailward.	Sir T. D. Pigott.
Captain G. Blaine.	LtCol. A. E. St. V. Pollard.
D. C. Campbell.	J. T. Proud.
J. Drummond.	Capt. C. G. E. Russell.
G. H. Duckworth.	A. St. G. Sargeaunt.
Rev. A. E. Ellison.	W. L. Sturge.
C. Garnett.	Lt. G. Swann,
A. R. Gillman.	M. Vaughan.
LtCol. A. E. Hamerton.	Commdr. R. E. Vaughan.
J. C. Hawkshaw.	E. M. Wade.
G. B. Honey.	LtCol. H. J. Walton.
E. Hudson.	H. Wormald.
Major H. Jones.	LtCol. J. W. Yerbury.
E. B. Maton.	·

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"The name of Mr. B. A. E. Buttress has been removed from the list of members under Rule 6.

"The membership of the Union is given below in comparison with the last five years :---

	1921.	1920.	1919.	1918.	1917.	1916.
Ordinary Members.	423	418	418	423	416	420
Extraordinary ., .	1	1	1	1	1	1
Honorary ,, .	9	9	7	8	9	9
Hon. Lady ' ,, .	8	8	8	8	9	8
Colonial ,, .	10	10	9	9	10	10
Foreign ,, .	16	16	13	20	19	19

"There are 49 candidates for ordinary membership and the fact of so large a number of gentlemen coming forward for election to the Union is most satisfactory, and one which has not been lost sight of by the Committee when considering the increase to the subscription to the Union."

The accounts were then approved and passed, after Mr. Bunyard had asked the Secretary what the legal charges were for.

The resolution approved by the Special General Meeting "that the annual subscription be raised from  $\pounds 1$  5s. to  $\pounds 2$  "—Rule 5 to read :—

"Every new Ordinary Member shall pay an Entrance "Fee of  $\pounds$ 4, and an Annual Subscription of  $\pounds$ 2 on his "election, and every Ordinary Member shall pay an "Annual Subscription of  $\pounds$ 2 on the 1st January of "each year. Every new Ordinary Member failing to "pay his Entrance Fee and his first Annual Subscrip-"tion before the 31st December immediately following "his election, shall have his election annulled, unless "he shall furnish a satisfactory explanation."

was then put to the meeting for confirmation and was carried unanimously.

The Chairman then put to the meeting a recommendation of the Committee that Rule 13 be amended by adding after

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the words "can be summoned by" the words "by the Committee or "-Rule 13 to read :--

"A special General Meeting can be summoned by "the Committee or by any ten members of the British "Ornithologists' Union on a written requisition ad-"dressed to the Committee for that purpose, which "requisition shall specify the object of such special "meeting. At such special Meeting the special business "to consider which it was convened, shall alone be "discussed. The Honorary Secretary when calling a "meeting on any application shall allow at least ten "days to intervene between the date of issue of the "notices and the date fixed for the meeting."

This was also carried unanimously.

A third recommendation of the Committee that Rule 17 be amended by adding after the words "Annual General Meeting" the words "or at a General Meeting called by the Committee for that purpose"—Rule 17 to read :—

"Any alteration or addition made to these rules may "be adopted by a majority of two-thirds of the members "present at the Annual General Meeting or at a "General Meeting called by the Committee for that "purpose provided due notice shall have been given "thereof in the circular convening the meeting."

There was a little discussion before the motion was voted on, one or two members making certain remarks in reference to the words "a majority of two-thirds." After this it was put to the meeting and carried unanimously.

Before proceeding to the next recommendation of the Committee with respect to the Committee appointed to consider records of occurrences of rare and hitherto unknown bird visitors to Great Britain, the Chairman informed the meeting that Dr. Eagle Clarke had expressed a desire that his name should be removed from the Committee, although he would be very pleased to act in an advisory capacity with regard to any Scotch records. The Chairman then read the recommendation of the Committee :—"That the Committee, viz. Mr. A. H. Evans, Dr. E. J. O. Hartert, Mr. T. Iredale, Rev. F. C. R. Jourdain, Mr. G. M. Mathews, Mr. W. L. Sclater, Dr. N. Ticehurst, Mr. H. F. Witherby, and Mr. E. C. Stuart Baker as Secretary to the Committee, elected at the last Annual General Meeting for five years to coincide with the election of the President of the Union to consider records of occurrences of rare and hitherto unknown bird visitors to Great Britain be, owing to the resignation of the President, re-elected *en bloc.*"

This was carried nem. con.

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The Rev. J. R. Hale and Mr. J. L. Bonhote were elected and consented to act as Scrutineers.

The following 49 candidates for Ordinary Membership were then balloted for and elected :---

Major Frederick Marshman Bailey, C.I.E. Lieut. Cyprian Thurlow Baker. Miss Mary Best. John Brindley Bettington. John Osmund Beven, M.A., M.R.C.S., L.R.C.P. Frederick N. Chasen. Capt. Riehard Rees Davies. Robert Heward Deane. George Edward William Dempster. Capt. Frederick Wynford Dewhurst. Arthur McNeill Farquhar. Gilbert George Feasey. Frank James Richard Field. Lieut. Harold Bingley Finch, M.C. Kenneth Fisher. Richard Taunton Francis, F.Z.S. David Eric Wilson Gibb. Capt. Humphrey Adam Gilbert. Edwin Leonard Gill, M.Sc. William Edwin Glegg. Miss Eva M. Godman.

John G. M. Gordon. Dr. James Harrison, M.R.C.S. Robert Elliott Harvey. Capt. Charles William Robert Knight, M.C. Stanley Lewis. Thomas Lewis, F.R.S., C.B.E. Dr. George Carmichael Low, M.R.C.P. Nathaniel Sampson Lucas, M.B. Arthur Frederick McConnell. The Viscount Maidstone. Allister William Mathews. John Henry McNeile. Cecil Norman. John Henry O'Connell, L.R.C.P. & S.I. Owen Rodenhurst Owen. Arthur Hamilton Paget-Wilkes. Charles Joseph Patten, M.A., M.D., Sc.D. Hans Thomas Lange Schaanning. Guy Chesterton Shortridge, M.B.E. The Vicomte Louis de Sibour, F.Z.S. Arthur de Carle Sowerby. Jesse Austin Sydney Stendall. Andrew Denvs Stocks. Cecil Vesey Stoney, J.P., D.L. Mrs. Rose Haig Thomas. John Francis Donald Tutt, M.R.C.V.S., F.R.M.S., F.Z.S. Thomas Wells. Major William Wordie, O.B.E., M.A.

Before the Meeting dissolved, the Rev. F. C. R. Jourdain explained the objects of the Oxford expedition to Spitsbergen, and after some remarks by Messrs. Trevor-Battye and H. J. Elwes,

Lord Rothschild proposed and Mr. Elwes seconded a vote of thanks to the Zoological Society for the use of the Meeting-room. Letters, Extracts, and Notes.

Mr. Seth Smith proposed and the Rev. J. R. Hale seconded a vote of thanks to the Auditor.

These were carried nnanimously, as was also a vote of thanks to the Chairman.

The Annual Dinner after the Meeting was well attended, over 100 members being present.

### The Oxford Expedition to Spitsbergen.

An expedition to Spitsbergen is being organized by the University of Oxford, and a sum of at least £3000 is required to earry out the work. The Oxford expedition is entirely scientific in its objects and aspirations. Special attention will be paid to ornithology. The breeding-habits and migratory movements of many of the rarer Arctic species are practically unknown, and the problem of reversed sexual selection, a subject very inadequately investigated, is found exclusively among birds whose breeding-grounds are in the north. The ornithological members of the party will make close and extensive observations and will not confine themselves to eggs and skins.

The expedition has the sanction and support of the University of Oxford, as well as of the heads of all the scientific departments concerned. It is proposed that two parties shall go out in scaling-sloops, the first early in June and the second a few weeks later, when the north coast is more likely to be free from ice. Although, as we have said, a sum of at least £3000 is necessary, if a larger sum is forthcoming the scope of the expedition, which will last only two or three months, could be profitably enlarged. The Rev. F. C. R. Jourdain is Chairman of the Committee, and contributions will be welcomed by and should be addressed to Mr. G. Binney, Hon. Secretary, Oxford University Expedition to Spitsbergen, Merton College, Oxford.

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